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PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional)		
		251812-1220		
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail	Application Number		Filed	
in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]	10/708,027		February 3, 2004	
on	First Named Inventor			
Signature	Yung-Chieh Lo			
	Art Unit		Examiner	
yped or printed ame 2419			Houshmand, Hooman	
Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.  This request is being filed with a notice of appeal.  The review is requested for the reason(s) stated on the attached sheet(s).  Note: No more than five (5) pages may be provided.				
I am the				
applicant/inventor.	/Daniel R. McClure/			
assignee of record of the entire interest.	Signature Daniel R. McClure			
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)	Typed or printed name			
attorney or agent of record. 38,962		770-933-9500		
		Tele	ephone number	
attorney or agent acting under 37 CFR 1.34.	Marc	h 20, 2009		
Registration number if acting under 37 CFR 1.34	_		Date	
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.				

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:		
Yung-Chieh Lo	Confirmation No: 2026	
Serial No.: 10/708,027	Examiner: Houshmand, Hooman	
Filed: February 3, 2004	Group Art Unit: 2419	
For: Method For Fragmenting An Incoming ) Packet Into A First Outgoing Packet And A ) Second Outgoing Packet	TKHR Docket: 251812-1220 Realtek Ref: 92A-092US	

### REMARKS IN SUPPORT OF PRE-APPEAL BRIEF REQUEST FOR REVIEW

Mail Stop Appeal Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

Sir:

The following remarks are provided in support of the accompanying pre-appeal brief request for review.

The FINAL Office Action rejected independent claims 1, 9, and 20 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Kitada (US 20030037163) in view of Applicant's admitted prior art (AAPA). Applicant respectfully disagrees and submits the following distinguishing remarks.

### **Fundamental Distinction of Claims over Rejections**

Before discussing the specific rejections, Applicant notes that there is a fundamental distinction between the claimed embodiments of independent claims 1, 9, and 20 (and therefore all claims) and the cited art. In this regard, each of these claims defines a method for fragmenting an incoming packet into two outgoing packets. The

payload of the incoming packet is divided across the two outgoing packets. A significant feature of the claimed embodiments it that the majority of the payload of the incoming packet is embodied in the second outgoing packet.

In view of the claims amendments made by Applicant earlier in the prosecution of this application, the rejections should be overturned. In this regard, the rejection embodied in the present Office Action is based on a misplaced application of the law surrounding "design choice." Specifically, the Office Action admitted that, even if the combination of Kitada and AAPA could be properly combined, the resulting combination still fails to disclose the claimed feature that the second packet embodies the majority of the packet. To address this admitted deficiency of the prior art, the Office Action alleged that "The choice, of which size packet – the larger or the smaller packet – is transmitted first, is a design choice. A person having ordinary skill in the art would recognize that transmitting the smaller or larger packet first would be obvious to try, since there are only two options present." Such a rejection constitutes error.

The rejections in Office Actions must follow the requirements of the MPEP, and MPEP 2144.04 requires: "The mere fact that a worker in the art could rearrange the parts of the reference device to meet the terms of the claims on appeal is not by itself sufficient to support a finding of obviousness. The prior art must provide a motivation or reason for the worker in the art, without the benefit of appellant's specification, to make the necessary changes in the reference device." (citing Ex parte Chicago Rawhide Mfg. Co., 223 USPQ 351, 353 (Bd. Pat. App. & Inter. 1984)).

The fact that the claimed embodiments specify that the second packet embodies a majority of the packet payload is not an arbitrary claim requirement. Indeed, this very feature was the central feature of the present application, in distinguishing the admitted prior art (see Figs. 2 and 3 of the present application in comparison to the inventive embodiment of Figs. 4 and 5). A significant benefit to this feature is a better utilization of buffers that are internal to the gateway units 112 and 114. Indeed,

Specifically, paragraph [0021] of the original application explains:

... At this point, the information stored in the first buffer (Buffer 1) is no longer needed and can be freed for use in storing a next incoming packet. Continuing, the next 128-bytes of Fragment 2 stored in the second buffer (Buffer 2) are transmitted. As soon as the data in the second buffer (Buffer 2) has been transmitted, Buffer 2 can be freed for use. This process continues for the remaining buffers (Buffer 3 to Buffer 12) with each buffer

being freed immediately after having its data transmitted. This is more efficient than the prior art, which requires the information in all the buffers to be stored until the data in the last buffer has been transmitted.

That is, by intentionally structuring the payload of the second outgoing packet to be larger than the payload of the first outgoing packet, more efficient utilization of the buffers in the gateway units. As such, it is clear that the relative payload size of the outgoing packets is not arbitrary, and therefore not merely a matter of "design choice."

For at least this fundamental reason, the rejections of the independent claims should be withdrawn. For at least the same reasons, all claim rejections should be withdrawn. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

# **Discussion of Specific Rejections**

For completeness, Applicant submits the following additional discussion, with respect to the specific rejections. As an initial comment, the fundamental distinction discussed above applies to all rejections. In addition, the distinctions noted in Applicant's previously filed response are also relevant, and are incorporated herein by reference.

Independent claim 1 recites:

1. A method for fragmenting an incoming packet for transmission as a first outgoing packet and a second outgoing packet, the method comprising:

storing a payload of the incoming packet in a plurality of storage units beginning in a first storage unit;

transmitting the first outgoing packet being formed according to a predetermined portion of the payload stored in the first storage unit; and

after transmitting the first outgoing packet, transmitting the second outgoing packet being formed according to a remaining portion of the payload stored in the storage units;

wherein the remaining portion corresponds to a majority of the payload of the incoming packet.

(*Emphasis added*). Claim 1 patently defines over the cited art for at least the reasons that the cited art fails to disclose the features emphasized above.

The Office Action admitted that neither Kitada or AAPA discloses the emphasized feature that the remaining portion corresponds to a majority of the payload

of the incoming packet. Instead, the Office Action merely alleged that this feature embodies a variant that is an obvious design choice. As explained above in this response, this feature is an intentional design feature that achieves improved buffer utilization in the gateway units. The Office Action has advanced no objective or supporting rationale for its "design choice" allegation, and as also noted above, MPEP 2144.04 requires more supporting rationale than that provided in the Office Action. Accordingly, the rejection of claim 1 should be withdrawn.

As a separate and independent basis for the patentability of claim 1, Applicant submits that the combination of Kitada and AAPA is improper and therefore does not render the claim obvious. In this regard, the Office Action combined Ko with Miyahara to reject the claims on the solely expressed basis that "it would have been obvious ... to implement Kitada's IP data encapsulation in accordance with PPPoE protocol." (see e.g., Office Action, p. 4)

This rationale is both incomplete and improper in view of the established standards for rejections under 35 U.S.C. § 103. In this regard, the alleged rationale for combining the references is merely an improper conclusory statement that embodies clear and improper hindsight rationale.

In this regard, AAPA acknowledges that the prior art involves a PPPoE protocol. Indeed the present invention (as embodied in claim 1) is much more similar to AAPA than it is to Kitada. As such, the application of Kitada as a principal reference is misplaced. Further, the invention defined in claim 1 uses a similar protocol to AAPA (not Kitada), except that the incoming packet payload is split between two outgoing packets, with the smaller portion of the payload being transmitted in the first outgoing packet. As admitted by the Office Action, Kitada does not teach this feature, and therefore, Applicant submits that there would be NO motivation for an artisan to combine any teaching from Kitada with AAPA. As such, the Office Action fails to set for the required objective indicia appropriate to support the rejection.

For at least these additional reasons, Applicant submits that the rejection of claim 1 is improper and should be withdrawn.

In all relevant respects, the rejections of claims 9 and 20 are similar to the rejection of claim 1, and claims 9 and 20 define over the cited art for the same reasons as claim 1.

#### CONCLUSION

For at least the foregoing reasons, it is submitted that this application is in condition for allowance and such a notice, with an allowance of all claims is earnestly solicited. If the Examiner believes that a conference would be of value in expediting the prosecution of this application, the Examiner is hereby invited to telephone the undersigned counsel to arrange for such a conference.

A credit card authorization is provided herewith to cover the fee associated with the accompanying petition for extension of time and the accompanying Notice of Appeal. No additional fee is believed to be due in connection with this submission. If, however, any fee is believed to be due, you are hereby authorized to charge any such fee to deposit account No. 20-0778.

Respectfully submitted,

/Daniel R. McClure/

By:

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